



Air Quality Permitting Project Memorandum

March 13, 2003

**TIER II Operating Permit and Permit to Construct
AIRS Facility No. 001-00190**

**Western Electronics Inc.
Meridian, Idaho**

Project No. T2-020050

Prepared by:

**Bill Rogers
Regional Permit Program Coordinator**

FINAL REVISED PERMIT

PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200 et al and IDAPA 58.01.01.400 et al; *Rules for the Control of Air Pollution in Idaho*.

PROJECT DESCRIPTION

The Department issued air quality Tier II operating permit and permit to construct No. 001-00190 (facility-wide permit) to Western Electronics, Inc. on August 23, 2002. The facility-wide permit establishes the applicable requirements and potential to emit for the facility.

The facility-wide permit is being revised in response to some issues raised during the October 17, 2002 permit handoff. There is no emissions increase associated with the this permit revision. The revised permit retains the applicable requirements established by Bob Baldwin of the Departments Boise Regional Office for the permits original technical and regulatory analysis. In some instances however, the content of a permit condition has been changed to correct a typographical error or to help clarify the condition, but the context of the permit condition has not changed.

Because this permitting action does not result in an increase in any regulated air pollutant, public notice and a public comment period are not required.

Each requested revision is listed below along with the Departments response and final action.

PERMIT AMENDMENTS

1. Page 1, item 5

Var Reeve is no longer the responsible official. Mr. Jim Bjorklund, the Plant Manager, is the responsible official.

The Department has revised the permit as requested. The responsible official on the cover page of the permit is now Jim Bjorklund with the title of Plant Manager.

2. Page 4, Permit Condition 1.3

Change the verbiage to describe the Vitronix and Heller reflow ovens as reflow ovens and not include the model number as was done in Section 3, Permit Condition 3.11 and Table 6.1. Other permit sections use the generic terms, reflow oven and wave solder machines. This change will also allow the change out of the machines without going through the permit modification procedures unless the amount of solder used will exceed the amount allowed by the permit.

Change the verbiage to describe the Vitronix and Hollis wave solder machines as wave solder machines one and two and not include the name or model number.

The Department has revised the permit as requested. All manufacturer references to the reflow ovens and wave solder machines has been deleted. In this case, allowable emissions limits are independent of the manufacturer.

3. Page 8, Permit Condition 3.9

Remove the circuit board monitoring requirement in Permit Condition 3.9 as discussed with Bob Baldwin and Tim Trumbull. The information is not needed because the facility is required to track the amount of solder used and the oven temperature.

The Department has revised the permit as requested. Allowable emissions are based on the amount of solder and flux used, the lead and tin content of the solder and the operating temperatures of the ovens and wave solder machines, not on the amount of circuit boards processed or produced.

4. *Page 8, Permit Condition 3.11*

Western Electronics Inc. requests that the reflow oven temperature be monitored once per day instead of once each eight hours. The reflow ovens operate from a temperature set point. All ovens are set to alarm and shut down should the temperature approach 600°F. Western Electronics Inc. requests that the facility be allowed to record the temperature during the daily maintenance procedure of checking the temperature set point.

The Department has revised the permit as requested. Upon review of the permit application, it does not appear that monitoring the oven temperature once every eight hours is required or necessary to assure proper operations. Safeguard mechanisms are in place to automatically shut down the ovens and solder machines as temperatures approach 600°F. Additionally, the temperature set point is checked daily.

5. *Page 9, Permit Condition 4.3*

Remove the words Vitronix and Hollis so that the sentence reads "...the wave solder machine stacks one and two..."

The Department has revised the permit as requested. Refer to revision number 2 above.

6. *Page 9, Permit Condition 4.4*

Change the heading to Solder Machine One, change the word Vitronix so that the sentence reads "...wave solder machine one..." and change the term solder paste to flux.

The Department has revised the permit, but not as requested. Manufacturer references have been removed as requested; however, the amount of flux that's allowed to be used has been combined for both wave solder machines. Because the process is the same for both wave solder machines, it doesn't matter which solder machine uses the flux, what does matter, in terms of emissions, is the amount of flux used.

7. *Page 9, Permit Condition 4.5*

Change the heading to Solder Machine Two, change the Hollis so that the sentence reads "...wave solder machine two..." and change the term solder paste to flux. If possible Western Electronics Inc. requests that both wave solder machines be given the 25% non-isopropanol concentration limit. This would allow the generic grouping and the terms wave solder machine one and wave solder machine two could be shortened to wave solder machines. The actual emissions are so far below the permitted emissions that this change could be made and the limit not exceeded for at least five years.

Refer to revision number 6 above.

8. *Page 9, Permit Condition 4.6*

Delete the term "...wave solder machine..." so that the sentence reads "...Pb content of the solder used shall not exceed 40%..."

The Department has revised the permit as requested. The lead content applies to the solder used, not to the wave solder machine.

9. *Page 9, Permit Condition 4.7*

Change the term Vitronix to wave solder machine one and Hollis to wave solder machine two.

The Department has not revised the permit as requested. The manufacturer reference has been deleted as requested, but the wave solder machines requirements have been combined into one permit condition instead of two. The wave solder machines can be treated as one source in terms of emissions because the process is the same and emissions are based on the lead and tin content in the solder and amount of flux that is used.

10. *Page 10, Permit Condition 4.10*

Delete the requirement to monitor the of flux used. A review of the technical memo has shown that the amount of PM₁₀ assumed was calculated from a percentage of lead and tin in the flux. The attached MSDS sheet shows that the flux has no lead or tin in the material.

Upon review of the submitted MSDS, the Department concurs with Western Electronics Inc. and has deleted the requirement to monitor and record the lead and tin content of the flux. Monitoring and recordkeeping of the flux non-volatile, or solids content is still required because it is a component of the overall PM₁₀ emissions from the facility.

11. *Page 10, Permit Condition 4.11*

Change the terms Vitronix and Hollis to wave solder machine one and wave solder machine two.

The Department has revised the permit as requested by deleting the manufacturer references. Refer to revision number 9 above.

12. *Western Electronics Inc. requests the requirements for the space heaters be removed from the permit because the heaters qualify for a categorical exemption.*

Requirements established by a PTC or Tier II operating permit cannot be removed without 1) submittal of a permit application in accordance with IDAPA 58.01.01.202 and 404, and 2) providing the permit for public notice and a public comment period.

RECOMMENDATIONS

Based on the review of the application materials, and all applicable state and federal regulations, staff recommends the Department issue amended Tier II Operating Permit and Permit to Construct No. 001-00109 to Western Electronics, Inc.

BR/sm

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cc: Mike McGown, Boise Regional Office